

IN THE CLAIMS:

Please amend the claims as follows.

1. (Currently amended) A method of monitoring the health of a system module in a system during state transitioning, wherein the system further includes a monitor module operationally connected to the system module, the method comprising:

~~[[-]]~~ ~~the system module outputting~~ receiving a status signal from the system module for predetermined system status points during state transitioning of the system module; ~~and~~

~~[[-]]~~ ~~the monitor module being operable to start~~ starting a timer ~~on~~ in response to the monitor module detecting a first status signal provided by the system module at one of the predetermined status points during state transitioning of the system module; and

resetting the timer ~~on~~ in response to the monitor module detecting a subsequent status signal within a determined period of time, wherein the subsequent status signal is provided by the system module at another one of the predetermined status points during state transitioning of the system module[[,]]; ~~and~~

~~whereby the timer is operable to indicate~~ generating a signal to indicate a failed transitioning of the system module in the event that the timer is not reset within [[a]] the determined period of time.

2. (Original) The method of claim 1, wherein the state transitioning comprises at least one of starting the system module and shutting down the system module.

3. (Original) The method of claim 1, wherein a signal is output by the system module for at least one of the following system status points, namely: at power on self test start; at power on self test end; at power on or reset; at an end of initial hardware power up, on starting booting, on ending booting, on a shutdown or panic power-off and on a system reset.

4. (Currently amended) The method of claim 1, ~~wherein the timer is reset on~~ further comprising:

resetting the timer in response to the monitor module detecting each of a set of successive status signals[[,]]; and

~~whereby the timer is operable to indicate~~ generating a signal to indicate a failed transitioning of the system module in the event that the timer is not reset within a respective determined period for each of a plurality of pairs of successive status signals.

5. (Original) The method of claim 1, wherein an initial period for the timer is determined to exceed an expected maximum time to a subsequent status signal assuming a healthy system module.

6. (Original) The method of claim 5, wherein the monitor module is operable to set the configuration of the system module, and wherein the monitor module is operable to use information about the configuration to compute a determined period to be applied for the timer.

7. (Original) The method of claim 5, wherein the system module is operable to inform the monitor module of a determined period to be applied for the timer.

8. (Original) The method of claim 5, wherein the system module is operable to provide the monitor module with details of the configuration of the system module, and wherein the monitor module is operable to use the configuration information to compute a determined period to be applied for the timer.

9. (Original) The method of claim 5, wherein the monitor module is operable to interrogate the system module to determine details of the configuration of the system module, and wherein the monitor module is operable to use the configuration information to compute a determined period to be applied for the timer.

10. (Original) The method of claim 5, wherein the monitor module is operable to record a time for a given pair of status signals on a given initiation of the system and to adapt the determined period for a subsequent system initiation.

11. (Original) The method of claim 5, wherein the monitor module is operable to record a time between a given pair of status signals on a given initiation of the system and to employ a determined period equal to a multiple of the actual time between a given pair of status signals for a subsequent system initiation.

12. (Original) The method of claim 1, wherein the monitor module is a service processor.

13. (Original) The method of claim 12, wherein the service processor is a shelf service processor for a shelf of a rack mountable blade system and at least one said system module is a processor blade receivable in the shelf.

14. (Currently amended) A computer system configured to receive a system module, ~~and the computer system~~ comprising:

a monitor module ~~operationally to be connected~~ configured to couple to the system module, ~~wherein:~~

[[-]] wherein the monitor module is operable to start a timer ~~on~~ in response to detecting a first status signal output by a received system module at one of predetermined system status points during state transitioning of the system module; ~~and~~

[[-]] wherein the monitor module is operable to reset the timer ~~on~~ in response to detecting a subsequent status signal within a determine period of time, wherein the subsequent status signal is output by [[a]] the received system module at another predetermined system status point during state transitioning of the system module[[,]]; and

~~whereby~~ wherein the timer is operable to ~~indicate~~ generate a signal to indicate a failed transitioning of the system module in the event that the timer is not reset within [[a]] the determined period of time.

15. (Original) The computer system of claim 14, wherein the state transitioning comprises at least one of starting the system module and shutting down the system module.

16. (Original) The computer system of claim 14, wherein the monitor module is responsive to signals output by a received system module for at least one of the following system status points, namely: at power on self test start; at power on self test end; at power on or reset; at an end of initial hardware power up, on starting booting, on ending booting, on a shutdown or panic power-off and on a system reset.

17. (Currently amended) The computer system of claim 14, wherein the monitor module is operable to reset the timer ~~is operable to be reset on~~ in response to detecting each of a set of subsequent status signals, ~~whereby~~ and wherein the timer is operable to ~~indicate~~ generate a signal to indicate a failed transitioning of the system module in the event that the timer is not reset within a respective determined period for each of a plurality of pairs of successive status signals.

18. (Original) The computer system of claim 14, wherein an initial period for the timer is determined to exceed an expected maximum time to a subsequent status signal assuming a healthy system module.

19. (Original) The computer system of claim 18, wherein the monitor module is operable to set the configuration of the system module, and wherein the monitor module is operable to use information about the configuration to compute a determined period to be applied for the timer.

20. (Original) The computer system of claim 18, wherein the monitor module is responsive to a system module providing a determined period to be applied for the timer.

21. (Original) The computer system of claim 18, wherein the monitor module is responsive to a system module providing details of the configuration of the system module, and wherein the monitor module is operable to use the configuration information to compute a determined period to be applied for the timer.

22. (Original) The computer system of claim 18, wherein the monitor module is operable to interrogate the system module to determine details of the configuration of the system module, and wherein the monitor module is operable to use the configuration information to compute a determined period to be applied for the timer.

23. (Original) The computer system of claim 18, wherein the monitor module is operable to record a time for a given pair of status signals on a given initiation of the system and to adapt the determined period for a subsequent system initiation.

24. (Original) The computer system of claim 18, wherein the monitor module is operable to record a time between a given pair of status signals on a given initiation of the system and to employ a determined period equal to a multiple of the actual time between a given pair of status signals for a subsequent system initiation.

25. (Original) The computer system of claim 14, wherein the monitor module is a service processor.

26. (Original) The computer system of claim 25, wherein the service processor is a shelf service processor for a shelf of a rack mountable computer system.

27. (Original) The computer system of claim 26, further comprising at least one said system module received in the shelf.

28. (Original) The computer system of claim 27, wherein the rack mountable computer system is a blade server system and wherein the system module is a server blade.

29. (Currently amended) A ~~system module for a~~ rack mountable computer system ~~configured to receive said system module and~~ comprising:

a shelf configured to receive a plurality of modules;

a system module received in the shelf;

~~a monitor module to be operationally connected~~ received in the shelf and coupled
to the system module[[,]];

wherein the system module being is operable to output provide status signals to
the monitor module at predetermined system status points during state transitioning of the
system module[[,]];

wherein whereby the monitor module is operable to set a time on receipt of a first
such status signal start a timer in response to detecting a first status signal provided by the
system module at one of the predetermined status points during state transitioning of the
system module and;

wherein the monitor module is operable to reset the timer on in response to
detecting a subsequent status signal within a determined period of time, wherein the
subsequent status signal is provided by the system module at another one of the
predetermined status points during state transitioning of the system module[[,]]; and

wherein whereby the timer is operable to indicate generate a signal to indicate a
failed transitioning of the system module in the event that the timer is not reset within
[[a]] the determined period of time.

30. (Currently amended) The ~~system module~~ rack mountable computer system of
claim 29, wherein ~~the state transitioning comprises at least one of starting the system~~
~~module and shutting down the system module~~ the monitor module is operable to reset the
timer in response to detecting each of a set of subsequent status signals, and wherein the
timer is operable to generate a signal to indicate a failed transitioning of the system
module in the event that the timer is not reset within a respective determined period for
each of a plurality of pairs of successive status signals.

31. (Currently amended) The ~~system module~~ rack mountable computer system of claim 29, wherein the monitor module is operable to record a time for a given pair of status signals on a given initiation of the system and to adapt the determined period for a subsequent system initiation based on the recorded time ~~the system module is operable to output a status signal for at least one of the following system status points, namely: at power on self test start; at power on self test end; at power on or reset; at an end of initial hardware power up, on starting booting, on ending booting, on a shutdown or panic power off and on a system reset.~~

32. (Currently amended) The ~~system module~~ rack mountable computer system of claim 29, wherein the system module is operable to provide the monitor module with an indication of the determined period to be applied for the timer.

33. (Currently amended) The ~~system module~~ rack mountable computer system of 29, wherein the system module is a server blade and for a the rack mountable computer system is a blade server system.

34. (Currently amended) A method for monitoring the health of a system module in a system during state transitioning, wherein the system further includes a monitor module operationally connected to the system module, the method comprising ~~A carrier medium carrying instructions for monitoring the health of a system module in a system during power transitioning, wherein a monitor module is operationally connected to the system module and the system module is operable to output a status signal at predetermined system status points during at least one of starting the system module and shutting down the system module, the instructions being operable to control the monitor module:~~

receiving a status signal from the system module for predetermined system status points during state transitioning of the system module;

starting a timer in response to the monitor module detecting a first status signal provided by the system module at one of the predetermined status points during state transitioning of the system module;

resetting the timer in response to the monitor module detecting a subsequent status signal within a determined period of time, wherein the subsequent status signal is provided by the system module at another one of the predetermined status points during state transitioning of the system module;

generating a signal to indicate a failed transitioning of the system module in the event that the timer is not reset within the determined period of time; and

recording a time for a given pair of status signals on a given initiation of the system and adapting the determined period for a subsequent system initiation based on the recorded time.

~~_____to start a timer on detecting a first status signal; and~~

~~_____to reset the timer on detecting a subsequent status signal, whereby the timer is operable to indicate a failed transitioning of the system module in the event that the timer is not reset within a determined period.~~

35. (Currently amended) A computer system configured to receive a system module,
the computer system comprising a system module and a monitor module operationally
connected to the system module, wherein:

a monitor module configured to couple to the system module;

wherein the monitor module is operable to start a timer in response to detecting a first status signal output by a received system module at one of predetermined system status points during state transitioning of the system module;

wherein the monitor module is operable to reset the timer in response to detecting a subsequent status signal within a determine period of time, wherein the subsequent status signal is output by the received system module at another predetermined system status point during state transitioning of the system module;

wherein the timer is operable to generate a signal to indicate a failed transitioning of the system module in the event that the timer is not reset within the determined period of time; and

wherein the monitor module is further operable to record a time for a given pair of status signals on a given initiation of the system and to adapt the determined period for a subsequent system initiation based on the recorded time.

~~the system module comprises means for outputting a status signal for predetermined system status points during state transitioning of the system module; and~~
~~the monitor module comprises means for start a timer on detecting a first status signal and for resetting the timer on detecting a subsequent status signal, whereby the timer is operable to indicate a failed transitioning of the system module in the event that the timer is not reset within a determined period.~~